

WHAT IS CLAIMED IS:

1. A document reading apparatus comprising:  
a document table for supporting a single document;  
a document tray for receiving a stack of

5 documents;

a line sensor for reading an image from each of  
the documents in units of lines parallel to a main  
scanning direction;

10 a sensor transporter for transporting the line  
sensor to scan the document on said document table from  
one reading surface edge in the sub-scanning direction  
during a first reading mode;

15 a document feeder for feeding each document  
received in said document tray such that the document  
is scanned from another reading surface edge opposite  
to the one reading surface edge of the document on said  
document table in the sub-scanning direction during a  
second reading mode; and

20 a processing section for processing a reading  
result of said line sensor as image data;

25 wherein said processing section has a controller  
for controlling a read start timing to compensate for a  
read range which may positionally deviate with respect  
to an identical effective reading area of each document  
between the first and second reading modes.

2. A document reading apparatus according to  
claim 1, wherein:

said document table is transparent;

said line sensor is disposed below said document table to face a document placed on said document table with a reading surface thereof faced down; and

5        said document feeder is configured to feed a document received in said document tray with a reading surface thereof faced up such that the reading surface faces to said line sensor.

10        3. A document reading apparatus according to claim 1, wherein said controller is configured such that the read start timing is set in the first reading mode at a timing that transportation of said line sensor is started from a reference reading position where a reading surface edge of the document faces said  
15        line sensor, and is set in the second reading mode at a timing that the effective reading area reaches said line sensor located at the reference reading position.

20        4. A document reading apparatus according to claim 3, wherein said controller is configured to confirm that the document is fed over said line sensor by an idle-feeding distance, to obtain the read start timing in the second reading mode.

25        5. A document reading apparatus according to claim 4, wherein said controller is configured to calculate said idle-feeding distance based on a sub-scanning directional dimension of the document, a sub-scanning directional dimension of an image to be

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produced according to the image data, and sub-scanning directional magnification.

5 6. A document reading apparatus according to claim 5, wherein said controller includes a document size detector which detects the sub-scanning directional dimension of the document received in said document tray.

10 7. A document reading apparatus according to claim 6, wherein said controller further includes an operation panel which enters the sub-scanning directional dimension of an image to be produced according to the image data, and the sub-scanning directional magnification.

15 8. A document reading apparatus according to claim 5, wherein controller includes an operation panel which enters the sub-scanning directional dimension of the document received in said document tray.

20 9. A document reading apparatus according to claim 8, wherein said operation panel is configured to further enter the sub-scanning directional dimension of an image to be produced according to the image data, and the sub-scanning directional magnification.

25 10. A document reading apparatus according to claim 5, wherein the controller includes an operation panel which enters the idle-feeding distance.

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